

We claim:

1. A method for preventing routing loops from forming when joining a node to a MPLS tree, comprising the steps of:

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- 3 -a) obtaining at a label switching router (LAR) a label mapping for a forwarding equivalence class (FEC);
- b) determining if previous bindings exist for said FEC;
- c) determining if said joining node is a single node or a parent node of a subtree;
- d) accepting the mapping for said single node if no previous bindings exist; and
- if said previous bindings exist when said subtree is attached to said MPLS tree:
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- 15 (2) e) sending a label splice message (Lsm) from said LAR to a root-node on a label switched path and returning a label splice message acknowledgment (ACK) to said LAR, and;
- f) accepting the mapping after receiving said ACK at said LAR;
- g) terminating any further action if said LAR is waiting for a previous ACK message;
- 20 h) forwarding said Lsm to the next LAR if said LAR is not waiting for said previous ACK message.
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